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EXAMINER
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2169

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/596,476

Applicant(s)

KIM ET AL.

Examiner

Michelle Owyang

Art Unit

2169

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 14 June 2006.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-20 are pending in this application.

#### ***Claim Objections***

2. The following claims are objected to for lack for antecedent basis:
  - a. "the number of input for each keyword", claim 1, line 6; claim 6, lines 5-6; claim 9, line 6; claim 13, line 5; claim 17, line 6;
  - b. "the same or similar meaning", claim 1, line 7; claim 9, line 4; claim 13, line 7; claim 17, line 8; and
  - c. "the searched representative category", claim 1, line 11; claim 6, line 10; claim 9, line 10; claim 13, lines 12-13.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225

USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is provisionally rejected on the ground of nonstatutory double patenting over claim 1 of copending Application No. 11/486194. Although the conflicting claims are not identical, they are not patentably distinct from each other because of an obvious modification. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows in the table below, which illustrates the anticipatory relationship of the claims.

Instant Application	11/486,194
1. A search service system comprising:	1. An electronic search system comprising:
a category classification database including at least one classification record, the classification record having a representative category related to a predetermined keyword group and a general category related thereto;	at least one category comprising: at least one group of keywords, wherein the at least one group of keywords includes a representative keyword, and wherein the at least one group of keywords includes a keyword group identifier for identifying the at least one group of keywords;
a keyword database maintaining a predetermined keyword group and data relating to the number of input for each keyword corresponding thereto, the keyword group having a representative keyword or a keyword having the same or similar meaning thereto;	a keyword database including data on the number of times user input has been received with respect to a keyword group;
an input unit for receiving a keyword from a user through a communication network;	an input module configured to receive a keyword from a user;
a first search unit for searching the category classification database for a representative category related to a first keyword group including the received keyword, the first search unit determining a second keyword group related to the searched representative category, the second keyword group including the first keyword group;	a searching module configured to search the keyword database for a first group of keywords which is representative of a category that includes the keyword received from the user, and for a second group of keywords, wherein the second group of keywords belongs to the same category as the first group of keywords;
a second search unit for searching the keyword database for the second keyword group and data relating to the number of input for each keyword corresponding thereto;	
an input order computing unit for computing an input order of the number of input for the	a computing module configured to rank the first group of keywords within its category

keywords within the searched representative category of the first keyword group by using the second keyword group and data relating to the number of input for each keyword corresponding thereto;	using data from the keyword database; and
an output unit for providing the user with the computed input order through the communication network, in association with the searched representative category and a representative keyword of the first keyword group; and	an output module configured to provide the ranking to the user.
an updating unit for updating data relating to the number of input for each keyword corresponding to the first keyword group, in the keyword database, in response to input of each of the keywords.	

It would have been obvious to one skilled in the art at the time of the invention was made to modify the cited steps as indicated in claim 1 of the instant US application since the omission/addition of the cited limitations would not have changed the search service system. See also MPEP § 804.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims recites "a system", but they fails to recite hardware component (i.e. processor, memory) in order to enable the functions to be realized.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

5. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1, 6, 9, 13 and 17, "data relating to the number of input for each keyword corresponding (lines 5-6)" is not clearly understood rendering the claim indefinite. It is unclear whether the "data" is referred to "the number of input for each keyword" or not. In addition, "computing an input order of the number of input for the keyword (lines 14-16)" is not clearly understood rendering the claim indefinite. It is unclear how "input order" is computed.

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim which it depends.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-4, 6-11, 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monteverde (Pub No. US 2003/0088553 A1) in view of Koike et al (Pub No. US 2005/0080773 A1), hereinafter Koike.

With respect to claim 1, Monteverde discloses a search service system ([0001]) comprising:



a category classification database including at least one classification record, the classification record having a representative category related to a predetermined keyword group and a general category related thereto (*most popular category corresponds to representative category, search terms correspond to keyword group, predefined category corresponds to general category, [0019], lines 2-5, [0030]*);

a keyword database maintaining a predetermined keyword group and data relating to the number of input for each keyword corresponding thereto (*search term database corresponds to keyword database, [0019], lines 6-9*), the keyword group having a representative keyword or a keyword having the same or similar meaning thereto (*search term's definitional relevancy and/or linguistic usage correspond to key word having the same or similar meaning, [0019], lines, [0019], lines 6-9, [0032], lines 5-10*);

an input unit for receiving a keyword from a user through a communication network (*[0033], lines 2-4*);

a first search unit for searching the category classification database for a representative category related to a first keyword group including the received keyword (*[0033], lines 7-9; Fig 3*);

a second search unit for searching the keyword database for the keyword group and data relating to the number of input for each keyword corresponding thereto (*searching for the internet sites based on statistical market research data, where statistical data correspond to key word and data related to the number of input, [0033], lines 9-10*);

an input order computing unit for computing an input order of the number of input for the keywords within the searched representative category of the keyword group by the keyword

group and data relating to the number of input for each keyword corresponding thereto (*calculate the number of times a particular category is selected in association with the search term, [0020], lines 5-12, [0035], lines 3-15*);

an output unit for providing the user with the computed input order through the communication network, in association with the searched representative category and a representative keyword of the first keyword group (*display the popular category with the corresponding sites, [0021], [0036], lines 24-27*); and

an updating unit for updating data relating to the number of input for each keyword corresponding to the first keyword group, in the keyword database, in response to input of each of the keywords (*updating data within category and search term based on prior results, [0036], lines 9-15*).

Monteverde does not explicitly disclose the first search unit determining a second keyword group related to the searched representative category, the second keyword group including the first keyword group.

However, Koike discloses a first input part designates a first query belong to a first category, a second input part designates a second query belong to a second category, and a third input part specifying searching condition associated with the first query and the second query (*query correspond to keyword, [0007], lines 3-5 & 15-16; Fig 14*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify input query techniques of Koike in the searching system of Monteverde in order to enhance an efficiency of searching (*Koike, [0005]*).

With respect to claim 6, Monteverde discloses a search service system ([0001]) comprising:

a category classification database including at least one classification record, the classification record having a representative category related to a predetermined keyword and a general category related thereto (*most popular category corresponds to representative category, search terms correspond to keyword group, predefined category corresponds to general category, [0019], lines 2-5, [0030]*);

a keyword database for maintaining a predetermined keyword and data relating to the number of input for each keyword corresponding thereto (*search term's definitional relevancy and/or linguistic usage correspond to key word having the same or similar meaning, and statistical information, [0019], lines, [0019], lines 6-9, [0032], lines 5-10, [0036], lines 3-5*);

an input unit for receiving a first keyword from a user through a communication network ([0033], lines 2-4);

a first search unit for searching the category classification database for a representative category related to the first keyword ([0033], lines 7-9; Fig 3);

a second search unit for searching the keyword database for the second keyword and data relating to the number of input for each keyword corresponding thereto (*searching for the internet sites based on statistical market research data, where statistical data correspond to key word and data related to the number of input, [0033], lines 9-10*);

an input order computing unit for computing an input order of the number of input for the keywords within the searched representative category of the first keyword, by using the keyword and data relating to the number of input for each keyword corresponding thereto (*calculate the*

*number of times a particular category is selected in association with the search term, [0020], lines 5-12, [0035], lines 3-15);*

an output unit for providing the user with the computed input order, in association with the searched representative category and the first keyword (*display the popular category with the corresponding sites, [0021], [0036], lines 24-27*); and

a data updating unit for updating data relating to the number of input for each keyword corresponding to the first keyword, in the keyword database, in response to input of the first keyword (*updating data within category and search term based on prior results, [0036], lines 9-15*).

Monteverde does not explicitly disclose the first search unit for determining a second keyword related to the searched representative category, the second keyword including the first keyword.

However, Koike discloses a first input part designates a first query belong to a first category, a second input part designates a second query belong to a second category, and a third input part specifying searching condition associated with the first query and the second query (*query correspond to keyword, [0007], lines 3-5 & 15-16; Fig 14*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify input query techniques of Koike in the searching system of Monteverde in order to enhance an efficiency of searching (*Koike, [0005]*).

With respect to claim 9, Monteverde discloses a search service system (*[0001]*), comprising:

a category classification database including at least one classification record comprising at least one category related to a predetermined keyword group, wherein the keyword group comprises a representative keyword or a keyword having the same or similar meaning thereto (*most popular category corresponds to representative category, search terms correspond to keyword group, predefined category corresponds to general category, [0019], lines 2-5, [0030]*);

a keyword database comprising a record including a predetermined keyword group and data relating to the number of input for each keyword corresponding thereto (*search term's definitional relevancy and/or linguistic usage correspond to key word having the same or similar meaning, and statistical information, [0019], lines, [0019], lines 6-9, [0032], lines 5-10, [0036], lines 3-5*);

an input unit for receiving a keyword from a user through a communication network ([0033], lines 2-4);

a first search unit for searching the category classification database for a category related to a first keyword group including the received keyword ([0033], lines 7-9; Fig 3);

a second search unit for searching the keyword database for the second keyword group and data relating to the number of input for each keyword corresponding thereto (*searching for the internet sites based on statistical market research data, where statistical data correspond to key word and data related to the number of input, [0033], lines 9-10*);

an input order computing unit for computing an input order of the number of input for the keywords within the searched category of the first keyword group by using the keyword group and data relating to the number of input for each keyword corresponding thereto (*calculate the*

*number of times a particular category is selected in association with the search term, [0020], lines 5-12, [0035], lines 3-15);*

an output unit for providing the user with the computed input order, in association with the category and a representative keyword of the first keyword group (*display the popular category with the corresponding sites, [0021], [0036], lines 24-27*); and

a data updating unit for updating data relating to the number of input keywords corresponding to the first keyword group, in the keyword database (*updating data within category and search term based on prior results, [0036], lines 9-15*).

Monteverde does not explicitly disclose the first search unit for determining a second keyword group related to the searched representative category, the second keyword group including the first keyword group.

However, Koike discloses a first input part designates a first query belong to a first category, a second input part designates a second query belong to a second category, and a third input part specifying searching condition associated with the first query and the second query (*query correspond to keyword, [0007], lines 3-5 & 15-16; Fig 14*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify input query techniques of Koike in the searching system of Monteverde in order to enhance an efficiency of searching (*Koike, [0005]*).

With respect to claim 13, Monteverde discloses a search service method (*[0001]*) comprising the steps of:

maintaining at least one classification record in a keyword classification database, wherein the classification record comprises a representative category related to a predetermined keyword group and a general category related thereto (*most popular category corresponds to representative category, search terms correspond to keyword group, predefined category corresponds to general category, [0019], lines 2-5, [0030]*);

maintaining a predetermined keyword group and data relating to the number of input for each keyword corresponding thereto, in a keyword database (*search term database corresponds to keyword database, [0019], lines 6-9*), wherein the keyword group comprises a representative keyword or a keyword having the same or similar meaning thereto (*search term's definitional relevancy and/or linguistic usage correspond to key word having the same or similar meaning, [0019], lines, [0019], lines 6-9, [0032], lines 5-10*);

receiving a keyword from a user through a communication network (*[0033], lines 2-4*);

searching the keyword classification database for a representative category related to a first keyword group including the received keyword (*[0033], lines 7-9; Fig 3*);

searching the keyword database for a keyword group related to the searched representative category and data relating to the number of input for each keyword corresponding to the keyword group (*searching for the internet sites based on statistical market research data, where statistical data correspond to key word and data related to the number of input, [0033], lines 9-10*);

computing an input order of the number of input for the keywords of the first keyword group by using the keyword group and data relating to the number of input for each keyword

corresponding thereto (*calculate the number of times a particular category is selected in association with the search term, [0020], lines 5-12; [0035], lines 3-15*);

providing the user with the computed input order through the communication network, in association with the searched representative category and a representative keyword of the first keyword group (*display the popular category with the corresponding sites, [0021], [0036], lines 24-27*); and

updating data relating to the number of input for each keyword corresponding to the first keyword group, in the keyword database, in response to input of the keyword (*updating data within category and search term based on prior results, [0036], lines 9-15*).

Monteverde does not explicitly disclose searching for a second key word group.

However, Koike discloses a first input part designates a first query belong to a first category, a second input part designates a second query belong to a second category, and a third input part specifying searching condition associated with the first query and the second query (*query correspond to keyword, [0007], lines 3-5 & 15-16; Fig 14*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify input query techniques of Koike in the searching system of Monteverde in order to enhance an efficiency of searching (*Koike, [0005]*).

With respect to claim 17, Monteverde discloses a computer readable record medium recording a program for implementing a search service method (*[0001]*) comprising the steps of:

maintaining at least one classification record in a keyword classification database, wherein the classification record comprises a representative category related to a predetermined



keyword group and a general category related thereto (*most popular category corresponds to representative category, search terms correspond to keyword group, predefined category corresponds to general category, [0019], lines 2-5, [0030]*);

maintaining a predetermined keyword group and data relating to the number of input for each keyword corresponding thereto, in a keyword database (*search term database corresponds to keyword database, [0019], lines 6-9*), wherein the keyword group comprises a representative keyword or a keyword having the same or similar meaning thereto (*search term's definitional relevancy and/or linguistic usage correspond to key word having the same or similar meaning, [0019], lines, [0019], lines 6-9, [0032], lines 5-10*);

receiving a keyword from a user through a communication network (*[0033], lines 2-4*);

searching the keyword classification database for a representative category related to a first keyword group including the received keyword (*[0033], lines 7-9; Fig 3*);

searching the keyword database for a keyword group related to the searched representative category and data relating to the number of input for each keyword corresponding to the keyword group (*searching for the internet sites based on statistical market research data, where statistical data correspond to key word and data related to the number of input, [0033], lines 9-10*);

computing an input order of the number of input for the keywords of the first keyword group by using the keyword group and data relating to the number of input for each keyword corresponding thereto (*calculate the number of times a particular category is selected in association with the search term, [0020], lines 5-12, [0035], lines 3-15*);

providing the user with the computed input order through the communication network, in association with the searched representative category and a representative keyword of the first keyword group (*display the popular category with the corresponding sites, [0021], [0036], lines 24-27*); and

updating data relating to the number of input for each keyword corresponding to the first keyword group, in the keyword database, in response to input of the keyword (*updating data within category and search term based on prior results, [0036], lines 9-15*).

Monteverde does not explicitly disclose searching for a second key word group.

However, Koike discloses a first input part designates a first query belong to a first category, a second input part designates a second query belong to a second category, and a third input part specifying searching condition associated with the first query and the second query (*query correspond to keyword, [0007], lines 3-5 & 15-16; Fig 14*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify input query techniques of Koike in the searching system of Monteverde in order to enhance an efficiency of searching (*Koike, [0005]*).

With respect to claims 2, 14, and 18, Monteverd discloses a management unit (*tracking searcher activities, [0036], lines 9-10*) for:

receiving a selection of a representative category related to a predetermined keyword group or a selection of a general category related thereto (*receiving site visit information relate to the category, [0036], lines 11-12*) and

changing the received representative category related to the keyword group or the received general category related thereto in the classification record (*updating the category based information, [0036], lines 12-15*).

With respect to claims 3, 7, 10, 15, and 19, although Monteverd discloses computing an input order of the number of input for the keywords within the searched representative category of the keyword group by the keyword group and data relating to the number of input for each keyword corresponding thereto (*calculate the number of times a particular category is selected in association with the search term, [0020], lines 5-12, [0035], lines 3-15*); and

an output unit for providing the user with the computed input order through the communication network, in association with the searched representative category and a representative keyword of the keyword group (*display the popular category with the corresponding sites, [0021], [0036], lines 24-27*) ; and

Monteverde does not explicitly disclose computes a second input order of the second keyword group within the representative category, based on the second keyword group and data relating to the number of input for each keyword corresponding thereto.

However, Koike discloses a first input part designates a first query belong to a first category, a second input part designates a second query belong to a second category, and a third input part specifying searching condition associated with the first query and the second query (*query correspond to keyword, [0007], lines 3-5 & 15-16; Fig 14*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply query techniques of Koike in the searching system of Monteverde in order to enhance an efficiency of searching (*Koike, [0005]*).

With respect to claims 4, 8, 11, 16, and 20, the claims are rejected for the same reasons as claims 3, 7, 10, 15, and 19 above. Although Monteverd discloses the output unit selects the predetermined number of keyword groups of which the input order ranks high (*selecting the most popular sites, [0036], lines 21-22*);

and provides the user with a input order corresponding to the selected second keyword group through the communication network, in association with the searched representative category and a representative keyword of the selected keyword group (*display the most popular category and sites, [0036], lines 24-29*).

Monteverde does not explicitly the second keyword groups.

However, Koike discloses a first input part designates a first query belong to a first category, a second input part designates a second query belong to a second category, and a third input part specifying searching condition associated with the first query and the second query (*query correspond to keyword, [0007], lines 3-5 & 15-16; Fig 14*).

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Monteverd and Koike, as applied to claim 1 above, and further in view of Shin et al. (Pub No. US 2003/0195901 A1), hereinafter Shin.

With respect to claim 5, Monteverd discloses an input order updating unit for updating an input order of the number of input for the keywords of a keyword group that is related to the searched representative category and corresponds to the keyword group (*update\$3 visiting information related to the category, [0036], lines 10-15*); and

output unit provides the computed the calculate search result in association with the input order (*[0036], lines 24-29*).

Monteverde does not explicitly disclose a storage unit for storing an input order of the number of input for the keywords of a keyword group related to a predetermined category;

a third search unit for searching the storage unit for an input order of the number of input for the keywords of a keyword group that is related to the searched representative category and corresponds to the second keyword group; and

an input order-band computing unit for computing a fluctuation band of input orders of the number of input for the keywords of the second keyword group by comparing the searched input order with the second input order.

However, Koike discloses a third input part specifying searching condition associated with the first query and the second query, where the first query and second query each corresponds to a category (*[0007], lines 3-5 & 15-16; Fig 14*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify input techniques of Koike in the searching system of Monteverde in order to enhance an efficiency of searching (*Koike, [0005]*).

Neither Monteverde nor Koike explicitly discloses a storage unit for storing an input order of the number of input for the keywords of a keyword group related to a predetermined category; and

an input order-band computing unit for computing a fluctuation band of input orders of the number of input for the keywords of the second keyword group by comparing the searched input order with the second input order.

However, Shin discloses a storage unit for storing an input order of the number of input for the keywords of a keyword group related to a predetermined category ([0037], Fig. 1); and

a computing unit for computing the difference of characteristic vector of two images ([0070], lines 3-4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify storing and computing techniques of Shin in the searching system of Monteverde and Koike in order to enhance searching environment.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Monteverd and Koike, as applied to claim 1 above, and further in view of Smith (Pub No. US 2002/0174110 A1).

With respect to claim 12, neither Monteverd nor Koike explicitly the data relating to the number of input keywords maintained in the keyword database includes data relating to the number of input keywords by period; and

the data updating unit periodically updates the data relating to the number of input for each keyword by period to 0.

However, Smith discloses the data relating to the number of input keywords maintained in the keyword database includes data relating to the number of input keywords by period ([0036], lines 8-13); and

the data updating unit periodically updates the data relating to the number of input for each keyword (*updating search term database at a periodic interval*, [0036], lines 5-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify periodic update of Smith in the searching system of Monteverde and Koike in order to enhance searching environment.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Owyang whose telephone number is 571-270-1254. The examiner can normally be reached on Monday-Friday (Alternate Fridays Off): 8am-5pm EST.

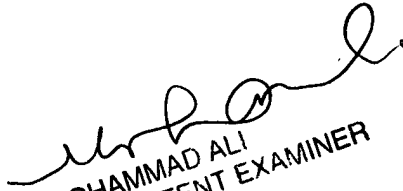
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ali can be reached on 571-272-4105. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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MO 12/10/2007



MOHAMMAD ALI  
SUPERVISORY PATENT EXAMINER